No. 7300092

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Oklahoma Agricultural Experiment Station

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS REQUIRED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

*[Waived]

COTTON

"Thorpe"

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington *this* 20th *day of* December *in the year of our Lord one thousand nine hundred and* seventy-six

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

FORM GR-470
(2-12-71)

UNITED STATES DEPARTMENT OF AGRICULTURE
CONSUMER AND MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION	2. KIND NAME	FOR OFFICIAL USE ONLY
Thorpe	Cotton	PVPO NUMBER 73092
3. GENUS AND SPECIES NAME	4. FAMILY NAME *(Botanical)*	FILING DATE 6.4.73 / TIME 8:30 A.M.
Gossypium hirsutum L.	Malvaceae	
	5. DATE OF DETERMINATION	FEE RECEIVED $250 / CHARGES
	May, 1972	

6. NAME OF APPLICANT(S)	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*	8. TELEPHONE AREA CODE AND NUMBER
Oklahoma Agricultural Experiment Station and ~~Agricultural Research Service, U. S. Department of Agriculture~~	Oklahoma State University Stillwater, Oklahoma 74074 ~~Beltsville, Maryland 20705~~	405-372-6211, X266 604-6425 ~~301-474-6500, X367~~

DDH 11/7/74 per instruction

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*	10. STATE OF INCORPORATION	11. DATE OF INCORPORATION
State University	Oklahoma	12-14-1891

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

Dr. Ralph S. Matlock, Head
Department of Agronomy
Oklahoma State University
Stillwater, Oklahoma 74074

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 12A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52, P.L. 91-577)*
- [X] 12B. Exhibit B, Botanical Description of the Variety
- [✓] 12C. Exhibit C, Objective Description of the Variety
- [X] 12D. Exhibit D, Data Indicative of Novelty
- [X] 12E. Exhibit E, Statement of the Basis of Applicant's Ownership

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable. *(See Section 52, P.L. 91-577).*

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? *(See Section 83(a), P.L. 91-577)* (If "Yes," answer 14B and 14C below.) [X] YES [ ] NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? [X] YES [ ] NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? Foundation, Registered, and Certified - three generations

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act (P.L. 91-577).

April 25, 1973
(DATE)

Jay C. Murray
(SIGNATURE OF APPLICANT)

5/22/73
(DATE)

(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and $50.00 fee to U.S. Dept. of Agriculture, Consumer and Marketing Service, Grain Division, Hyattsville, Maryland 20782. Retain one copy for your files. All items on the face of the form are self-explanatory unles noted below.

ITEM

5 Insert the date the applicant determined that he had a new variety.

12a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.

12b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.

12c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.

12d Provide complete data indicative of novelty. Seed and plant specimens may be submitted and seeds submitted may be sterile. Where possible, include photographs of plant comparisons, chemical tests, etc.

12e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

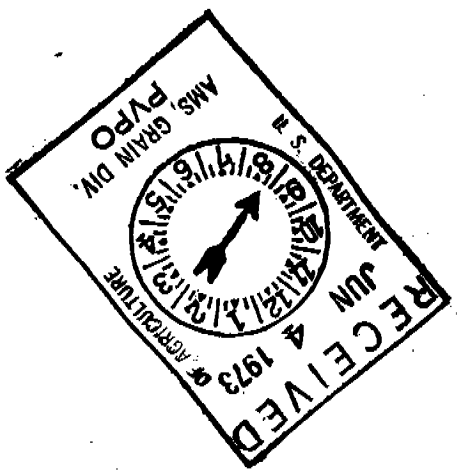

Exhibit A

Origin and Breeding History of the Variety

'Thorpe' stems from crosses initiated in 1963 by Dr. Jay C. Murray and Mr. J.W. Simmons both of whom also performed selections in the early generation material. The final progeny-row selections, replicated testing, and recommendation for release were made by Dr. Laval M. Verhalen and Mr. Simmons. Dr. L.A. Brinkerhoff assisted by making determinations of disease reactions for verticillium wilt and bacterial blight while Dr. A.J. Kappelman, Jr., did likewise for fusarium wilt. This variety is an approximate 50:50 mixture of two lines which were designated and tested as #5 and #6, respectively, after the 1967 season. No. 5 was an F_6 selection out of the cross, ('Lankart 611' X 'Fox 42-5') X Fox 42-5, while #6 was an F_7 selection out of #5. Tests were conducted in Oklahoma at two to three irrigated locations per year over the five-year period, 1967-71. Several tests were lost during the period of evaluation leaving 10 experiments on which the recommendation for release was based.

Thorpe cotton is storm-resistant but contains a small percentage of open bolls as do most other storm-resistant varieties.

OKLAHOMA STATE UNIVERSITY • STILLWATER

Department of Agronomy
(405) 372-6211, Ext. 278

74074

March 31, 1976

Dr. J.J. Higgins, Examiner
Plant Variety Protection Office
Grain Division
USDA, AMS
6525 Belcrest Road
Hyattsville, Maryland 20782

Re: Application #7302 'Thorpe' Cotton

Dear Dr. Higgins:

This is in reply to your request (2-2-76) for clarification of information under Exhibit A concerning variants. The phenotypic variance and genetic stability of Thorpe which was increased in the F7 generation has not been statistically significant in subsequent multiplication.

Hence, no phenotypic variants have been observed in the Thorpe cotton variety. After the variety was released it has appeared to be genetically stable.

If you have further questions, please let us know.

Very sincerely yours,

Ralph S. Matlock

Ralph S. Matlock, Head
Department of Agronomy

RSM/ss

Exhibit B

Botanical Description of the Variety

Thorpe is a variety of upland cotton (Gossypium hirsutum L., fam. Malvaceae). It has green plant color, has normal leaf shape, and is glanded.

Thorpe is higher yielding, has more tolerance to verticillium wilt, has a longer fiber, and has a higher micronaire than Westburn. The two varieties have essentially the same pulled lint percent, earliness, bacterial blight susceptibility, fiber length uniformity, and fiber strength. Westburn has more resistance to fusarium wilt and a higher degree of stormproofness. In comparison with Stoneville 7A, Thorpe has higher yield, more earliness, more storm resistance, and a higher fiber length uniformity. The two varieties exhibit practically the same pulled lint percent, verticillium tolerance, bacterial blight susceptibility, micronaire, and 1/8" gauge stelometer strength. Stoneville 7A has a longer fiber and a higher 0" gauge stelometer strength. Thorpe was bred for and tested under irrigated production where verticillium wilt is a moderate-to-severe problem. It should do well under high rainfall environments, but the variety has not been tested under dryland conditions. This variety is storm resistant but it has some open-boll plants as do most other storm resistant varieties. Because of the high percentage of storm resistant bolls, stripper harvest is required.

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-8 (10-2-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C (Cotton)

OBJECTIVE DESCRIPTION OF VARIETY

COTTON (*GOSSYPIUM SPP.*)

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(S)

Oklahoma Agricultural Experiment Station

ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*)

Oklahoma State University
Stillwater, Oklahoma 74074

FOR OFFICIAL USE ONLY

PVPO NUMBER: 73092

VARIETY NAME OR TEMPORARY DESIGNATION: Thorpe

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. SPECIES:

[1] 1 = GOSSYPIUM HIRSUTUM 2 = GOSSYPIUM BARBADENSE

2. AREA(S) OF ADAPTION (0 = Not Tested, 1 = Not Adapted, 2 = Adapted):

[0] EASTERN [0] DELTA [0] CENTRAL [0] HIGH PLAINS [0] EL PASO AREA

[0] WESTERN LOW HOT VALLEYS [0] SAN JOAQUIN [2] OTHER (*Specify*) Oklahoma (under irrigation)

3. MATURITY (50% Open Boll):

[0][3] NO. OF DAYS *EARLIER* THAN ..... [3]

[0][2] NO. OF DAYS *LATER* THAN ..... [8]

1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213
4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1
7 = LANKART 57 8 = OTHER (*Specify*) Westburn

4. PLANT HABIT:

[2] 1 = SPREADING 2 = INTERMEDIATE 3 = COMPACT

[3] 1 = FOLIAGE SPARSE 2 = DENSE 3 = OTHER (*Specify*) Intermediate

5. PLANT HEIGHT:

[0][0] CM. *SHORTER* THAN ..... [3]

[-][-] CM. *TALLER* THAN ..... [8]

1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213
4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1
7 = LANKART 57 8 = OTHER (*Specify*) Westburn

6. MAIN STEM:

[2] 1 = LAX 2 = ASCENDING 3 = ERECT

[-] CM. TO FIRST FRUITING BRANCH

[-][-] NO. OF NODES TO FIRST FRUITING BRANCH (*from cotyledonary node*)

7. LEAF:

[-][-] CM. WIDTH OF WIDEST LEAVES AT MATURITY

8. LEAF PUBESCENSE:

[5] 1 = GLABROUS (HAIRS AS SPARSE AS D_2 SMOOTH)
2 = SMOOTH LEAF (DELTAPINE SMOOTH LEAF) 3 = PUBESCENT (STONEVILLE 213)
4 = HEAVY PUBESCENCE (H_1 OR H_2) 5 = OTHER (*Specify*) 2 to 3

9. LEAF COLOR:

[3] 1 = VIRESCENT YELLOW 2 = LIGHT GREEN 3 = DARK GREEN (*Acala-442*) 4 = RED
5 = OTHER (*Specify*) _____

10. LEAF TYPE:

[1] 1 = NORMAL 2 = OKRA 3 = SUPER OKRA 4 = OTHER (*Specify*) _____

11. FLOWER:

[2] 1 = NECTARILESS 2 = NECTARIED

[1] Petals: 1 = CREAM 2 = YELLOW [1] Pollen: 1 = CREAM 2 = YELLOW

12. FRUITING BRANCH TYPE:

[3] 1 = CLUSTER 2 = SHORT 3 = NORMAL [1] 1 = DETERMINATE 2 = INDETERMINATE

13. GOSSYPOL CONDITION:

[3] 1 = GLANDLESS 2 = REDUCED GLANDS 3 = NORMAL GLANDS
4 = OTHER (*Specify*) _____

[1] 1 = NORMAL BUD GOSSYPOL
2 = HIGH BUD GOSSYPOL

14. SEEDS: letter 12/19/75 1/13/75 letter

[2][6] ± [1][5] SEED INDEX (*Fuzzy seed basis*)

[2] Seed Fuzz: 1 = SPARSE (GREGG 35) 2 = MODERATE (DPL-16) 3 = HEAVY (ACALA SJ-1) 4 = OTHER (*Specify*)

00005 5 of 14

PV# 73092 THORPE

FORM GR-470-8 (REVERSE)

15. BOLLS:

2 Locules: 1 = 3-4, 2 = 4-5

\- - NO. SEEDS PER BOLL

34.7 ± .67 Picked (Pulled)

2 3 4 LINT PERCENT

\- - MM. DIAMETER

1 Pitted: 1 = NONE, 2 = FINELY, 3 = COURSELY

6 9 2 ± .14 letter 12/19/75 GRAMS SEED COTTON PER BOLL

2 Breadth: 1 = BROADER AT BASE, 2 = BROADER AT MIDDLE

2 Type: 1 = STORMPROOF (WESTBURN 70), 2 = STORM RESISTANT (LANKART 57), 3 = OPEN (DELTAPINE 16)

3 Shape: 1 = LENGTH < WIDTH, 2 = LENGTH = WIDTH, 3 = LENGTH > WIDTH

16. BRACTEOLES:

3 Breadth: 1 = LENGTH < WIDTH 2 = LENGTH = WIDTH 3 = LENGTH > WIDTH

1 Teeth: 1 = FINE 2 = COURSE

4 Teeth: 1 = 3-4 2 = 5-7 3 = 8-10 4 = OTHER (Specify) 11-15

17. YIELD: Compared to—

\- - - PERCENT LESS THAN . . . . . \-

0 9 8 PERCENT MORE THAN 3

1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213 4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1 7 = LANKART 57

18. FIBER LENGTH (Complete one or more of the following and give the means):

0 5 2 SPAN LENGTH 50%

1 0 7 SPAN LENGTH 2.5%

\- - - U.H.M. LENGTH

\- - - MEAN LENGTH

3 4 STAPLE LENGTH 32nd INCHES

\- - UNIFORMITY RATIO (MEAN/U.H.M.)

4 9 UNIFORMITY INDEX (50% SPAN/2.5% SPAN)

19. FIBER STRENGTH AND ELONGATION:

0 8 2 1,000 P.S.I.

\- - - ELONGATION E_1 letter 12/19/75

3 7 7 STILOMETER T_0

3 6 0 MICRONAIRE READING

1 1 2 YARN STRENGTH (Give test method) cN/tex ± .23

2 0 5 STILOMETER T_1

20. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

2 VERTICILLIUM WILT

2 FUSARIUM WILT

0 ROOT KNOT NEMATODE

0 BACTERIAL BLIGHT (Race 1)

0 BACTERIAL BLIGHT (Race 2)

0 ASCOCHYTA BLIGHT

0 PHYMATOTRICHUM ROOT ROT

0 RHIZOCTONIA

0 ANTHRACNOSE

0 RUST

0 OTHER (Specify)

21. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

0 BOLL WEEVIL

0 APHID

0 FLEAHOPPER

0 LEAFWORM

0 FALL ARMYWORM

0 GRASSHOPPER

0 LYGUS

0 PINK BOLLWORM

0 STINKBUG

0 THRIP

0 CUTWORM

0 SPIDERMITE

0 OTHER (Specify)

REFERENCES: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

(1) Brown, Harry B., and J. O. Ware, 1958, Cotton, McGraw-Hill Book Company, Inc., New York.

(2) Lewis, C. F., and H. H. Ramey, Jr., 1971, 1970 Regional Cotton Variety Tests, ARS 34-130, United States Department of Agriculture.

COLORS: Nickerson's or any recognized color fan may be used to determine flower color of the described variety.

OKLAHOMA STATE UNIVERSITY • STILLWATER

Department of Agronomy
(405) 372-6211, Ext. 278

74074

December 19, 1975

Dr. Joseph J. Higgins, Examiner,
Plant Variety Protection Office
Grain Division
USDA, AMS
6525 Belcrest Road
Hyattsville, Maryland 20782

Re: Telephone request on Thorpe cotton #73092

Dear Joe:

The information that you requested for Thorpe cotton is given below which can be made a part of Exhibit C.

Exhibit C	'Thorpe'	'Westburn 70'	'Lankart LX571'
#14 Seed index	12.6 ±.15	12.1 ±.24	14.8 ±.20
#15 Grams seed - cotton per boll	6.92±.14	7.15±.24	8.43±.22
#15 Line percent - picked	34.7 ±.67	33.0 ±.36	34.6 ±.35
#19 Yarn strength - yarn tenacity in cN/tex	11.2 ±.23	10.7 ±.36	10.7 ±.34

Very sincerely yours,

Ralph S. Matlock

Ralph S. Matlock, Head
Department of Agronomy

RSM/ss

00007

Application No. 73092
Cotton - 'Thorpe'

Exhibit D - Novelty

'Thorpe' is most similar to 'Paymaster 909'. 'Thorpe', when grown under irrigation in Oklahoma, has a higher yield (33.9 %), has 3/32 of an inch longer fiber, has earlier maturity (16.9 ~~days~~ % MORE LINT 1ST PICKING), and has 0.6 units lower micronaire when compared with 'Paymaster 909'.

Ralph S. Matlock

Signature

additions from letter
Jan 29, 1975
JJ/L

Exhibit D

Data Indicative of Novelty

Thorpe combines a high level of tolerance to verticillium wilt with the storm resistant boll and high yield under irrigation in Oklahoma, a combination of characters not previously available. Only one other storm resistant variety ('Paymaster 909') has a considerable degree of verticillium tolerance, but it is extremely low yielding in Oklahoma. The two varieties may be further distinguished by their fiber length (Thorpe has 3/32 of an inch longer fiber), their relative maturity (Thorpe has an approximately 16% greater percent first harvest), and their fiber coarseness (Paymaster 909 has about 0.6 units higher micronaire). Fiber strength may be slightly higher in Paymaster 909.

Relative to two other adapted varieties (i.e., Westburn and Stoneville 7A), Thorpe is higher yielding, has more tolerance to verticillium wilt, has a longer fiber, and a higher micronaire than Westburn; and it has a higher yield, more earliness, more storm resistance, and a higher fiber length uniformity than Stoneville 7A. Westburn has more resistance to fusarium wilt and a higher degree of stormproofness. Stoneville 7A has a longer fiber and a higher 0" gauge stelometer strength. Thorpe and Stoneville 7A have essentially the same tolerance to verticillium wilt.

revised 6-5-

Exhibit D

Data Indicative of Novelty

Thorpe combines a high level of tolerance to verticillium wilt with the storm resistant boll and high yield in Oklahoma, a combination of characters not previously available. Only one other storm resistant variety ('Paymaster 909') has a considerable degree of verticillium tolerance, but it is extremely low yielding in Oklahoma. The two varieties may be further distinguished by their fiber length (Thorpe has 3/32 of an inch longer fiber), their relative maturity (Thorpe has an approximately 16% greater percent first harvest), and their fiber coarseness (Paymaster 909 has about 0.6 units higher micronaire). Fiber strength may be slightly higher in Paymaster 909.

Differences Between 'Thorpe' and 'Paymaster 909'

OKLAHOMA AGRICULTURAL EXPERIMENT STATION

Characteristics	No. Tests	Thorpe	Paymaster 909
Lint yield (lbs/acre)	4*	628.	415.
Earliness (% 1st harvest)	3	72.9	56.0
Fiber length (2.5% span, inches)	4	1.071	0.980
Micronaire (ug/inch)	4	4.2	4.8
Fiber strength (P.S.I. in 1000's)	4	82.0	86.1

* Irrigated tests at Altus and Chickasha in 1969 and 1970.

Differences

Yield: 628-415 = 213 lbs/acre higher (33.9%) for Thorpe

Earliness: 72.9-56.0 = 16.9% earlier for Thorpe

Fiber length: 1.071-0.980 =0.091 inches (approx. 3/32's) longer for Thorpe

Micronaire: 4.8-4.2 =0.6 ug/inch lower for Thorpe

Fiber strength: 86.1-82.0 =4.1 P.S.I. in 1000's weaker for Thorpe (no. of tests insufficient to show this difference to be significant)

Comparison of Agronomic and Fiber Characteristics of Thorpe With Westburn and Stoneville 7A Based on Replicated Field Trials Under Irrigation in Oklahoma, 1967-71.

Characteristics	No. tests	Thorpe	Westburn	Stoneville 7A
Lint yield (lbs./acre)	10	628.	568.	572.
Lint percent (pulled)	10	23.4	22.8	22.5
Earliness (% first harvest)	9	63.9	65.9	58.7
Fusarium wilt rating*	1	48.8	36.9	—
Verticillium wilt rating**	10	2.2	1.1	2.0
Bacterial blight rating***	1	4.0	4.0	4.0
Boll type rating****	5	2.0	3.0	1.0
Fiber length (2.5% span, inches)	10	1.07	1.04	1.11
Fiber length (32's)	10	34.3	33.4	35.6
Unif. index (50% span/2.5% span)	8	49.3	47.5	46.1
Micronaire	10	3.6	3.2	3.5
Fiber strength (1/8" gauge stel., gf/tex)	10	20.5	20.3	20.1
Fiber strength (0" gauge stel., gf/tex)	8	37.7	37.3	40.5
Fiber strength (lbs./sq. in. in 1000's)	8	81.5	80.6	87.5

*Percent wilt as was determined for #5, #6, and Westburn in the 1971 Regional Wilt Screening Test at Tallassee, Alabama, by A. J. Kappelman, Jr., as LMV 8, LMV 2, and LMV 10, respectively. Two entries of 'Rowden' interspersed in the Oklahoma material averaged 72.4% wilt. Stoneville 7A was not included in this test.

**Visual symptoms assigned on a scale from 0 to 3 where 0 = 'Kemp' or 'Lankart 57', 1 = intermediate, 2 = Stoneville 7A, and 3 = more tolerant than Stoneville 7A. (A check row of Kemp or Lankart 57 and one of Stoneville 7A were grown on each side of every entry in the tests for the purpose of assigning these grades.) L. A. Brinkerhoff artificially inoculated 80 plants of #5 and 76 plants of #6 and their weighted verticillium grade was 5.2 ± 2.5 compared to 8.1 ± 3.4 for 'Stoneville 62'. [See Crop Science 11:407-412. 1971. (Table 2) for the interpretation of this grading scale.]

***Visual symptoms on a scale from 1 = immune, 2 = resistant, 3 = intermediate, and 4 = susceptible. L. A. Brinkerhoff performed the inoculations and graded for blight reactions.

****Visual grades where 0 = openboll, 1 = fairly loose but some storm resistance, 2 = storm resistant, and 3 = stormproof. (See text for additional comments on this characteristic.)

November 8, 1974

Plant Variety Protection Office
Grain Division, Agricultural Marketing Service
U. S. Department of Agriculture
Hyattsville, Maryland 20782

Gentlemen:

Subject: Application No. 73092

Variety and kind 'Thorpe', Cotton

As provided in section 83(a) of the Plant Variety Protection Act, 7 U.S.C. 2321, we request that the Certificate on the above variety be issued with a notation on each Certificate that the right to exclude others from selling, offering for sale, reproducing, importing or exporting the variety covered by this Certificate, or using it in producing a hybrid or different variety is waived.

It has been agreed that the certificate should be issued in the name(s) of:

OKLAHOMA AGRICULTURAL EXPERIMENT STATION

~~Agricultural Research Service, U.S. Dept. of Agri.~~

DJR 11/4/76 per instructions

4/24/75
DATE

Ralph S. Matlock

00013

Exhibit E

Statement of the Basis of Applicants' Ownership

Dr. James A. Whatley, Director of the Oklahoma Agricultural Experiment Station, ~~and Dr. T.W. Edminster, Administrator, Agricultural Research Service, U.S. Department of Agriculture, are~~ the ~~co~~-applicants. Dr. Laval M. Verhalen (plant breeder), Dr. Jay C. Murray (former plant breeder), and Mr. J.W. Simmons (research assistant) made the major contributions to the selection, development, and evaluation of Thorpe. Dr. L.A. Brinkerhoff (USDA plant pathologist) assisted by making determinations of disease reactions for verticillium wilt and bacterial blight while Dr. J.A. Kappelman, Jr., (USDA plant pathologist) did likewise for fusarium wilt. Dr. James A. Whatley, Director of Oklahoma Agricultural Experiment Station ~~and Dr. T.W. Edminster, Administrator, Agricultural Research Service, U.S. Department of Agriculture are~~ the applicants and owner of the Thorpe cotton variety.

11/4/76

11/4/76
per instruction